BANGALORE MAHANAGARA PALIKE

DETAILED ESTIMATE FOR THE WORK OF **Remodeling of SWD BP 026 (BY03) from BB Nagara, Kodigehalli to H-200 primary drain near Nagashettihalli main road in ward no.08, in Yelahanka Zone**

A. Cost of Construction of SWD BP026(BY03) Ch.597.2 to 748.20 mtrs **Est.Cost 16000000.00**

Sl. No.	Description	Dimensions				Qty.	Rate /	Amount
		No.	L.	B.	D		Unit	
1	2	3	4	5	6	7	8	9
1	Diversion of water course by providing Coffer dams or bunds or islands as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., complte. 1.50 mtrs depth below LWL (Page No.254, Item No. 37.41.2)							
		1	151.00	1.75	1.75	462.44		
						462.44	330.48	152826.00
							Per Cmtr	
	Basic Rate	306.00						
	Add 8% A.W	24.48						
	Total	330.48						
2	KSRRB M2100-5.1: Earth work in excavation for foundation of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications. "V. Marshy soil - A.Manual Means upto 3 m depth . MORTH Specification No.304 (Page No.207, Item No. 27.13)							
		1	151.00	3.60	0.65	353.34		
						353.34	116.64	41214.00
							Per Cmtr	
	Basic Rate	90.00						
	Add 20% extra for De watering	18.00						
	Add 8% A.W	8.64						
	Total	116.64						
3	KSRRB M200-12.3 Dismantling of Existing Structures like Culverts,Bridges,Retaining Walls and other structures comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding where ever necessary,sorting the dismantled material,disposal of unserviceable material and stacking the seviceable material with all lifts complete as per specifications.(Prestressed/ reinforced cement concrete grade M20 and above) (Page No.133, Item No. 18.19)							
		1	30.00	3.70	0.30	33.30		31792.170
						33.30	~~1145.66~~	~~38151.00~~
							Per Cmtr	
	Basic Rate	884.00					954.72	
	~~Add 20% extra for De~~	~~176.80~~						
	Add 8% A.W	~~84.86~~ 70.72						
	Total	~~1145.66~~ 954.72						

Sl. No.	Description	Dimensions				Qty.	Rate /	Amount
		No.	L.	B.	D		Unit	
4	KSRRB M200-15.2 : Dismantling of existing structures like culverts, bridges retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work including T & P and scaffolding wherever necessary sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres complete as per specification.iii) Dismantling Stone Masonry. B.Rubble Stone masonry in cement mortar (Page No.145, Item No. 18.27)							
	Existing walls	2	151.00	0.60	1.50	271.80		
						271.80	226.80	61644.00
							Per Cmtr	
	Basic Rate	210.00						
	Add 8% A.W	16.80						
	Total	226.80						
5	KSRRB M200-12.2: Dismantling of existing structures like culverts, bridges retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work including T & P and scaffolding wherever necessary sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres complete as per specification. i) Lime/Cement concrete. I.By Manual means : A. Lime/Cement Concrete, I.By Manual means : B cement concrete Grade M-15 & M-20 (Page No.133, Item No. 18.18)							
		1	151.00	4.00	0.20	120.80		
						120.80	347.76	42009.00
	Basic Rate	322.00					Per Cmtr	
	Add 8% A.W	25.76						
	Total	347.76						
6	KSRRB M2100-2.1 : Earth work in excavation for foundation of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications. B. Mechanical Means (i) Depth upto 3 m. MORTH Specification No.Section 304 (Page No.206, Item No. 27.4) In ordinary soil.							
	For Drain	1	151.00	5.50	3.10	2574.55		
	for approach slab	2	9.00	3.50	0.45	28.35		
		2	9.00	13.00	0.45	105.30		
	Deduction for existing vent	-1	151.00	3.00	1.50	-679.50		
						2028.70		
					Total	**2028.70**		
						2028.70	43.20	87640.00
	Basic Rate	40.00					Per Cmtr	
	Add 8% A.W	3.20						
	Total	43.20						

Sl. No.	Description	Dimensions				Qty.	Rate /	Amount
		No.	L.	B.	D		Unit	
7	KSRB 2.8 : Providing and Filling in foundation with granite/trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead upto 50m and lift of 1.5m complete as per specifications.Specification No.KBS (Page No.6, Item No. 2.15)							
		1	151.00	5.00	0.30	226.50		
						226.50	1962.36	444475.00
							Per Cmtr	
	Basic Rate	1817.00						
	Add 8% A.W	145.36						
	Total	1962.36						
8	KSRRB M2100-10 : Plain cement concrete M 10 with OPC cement @ 220 kgs with crushed 40m and down size graded grantie metal coarse aggregates @ 0.84 cum and fine aggregates @ 0.56 cum in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days complete as per specifications. MORTH Specification No.2100 (Page No.208, Item No. 27.18)							
		1	151.00	5.00	0.15	113.25		
						113.25	5171.04	585620.00
							Per Cmtr	
	Basic Rate	4788.00						
	Add 8% A.W	383.04						
	Total	5171.04						
9	KSRRB M2700-6 : PCC M15 Grade leveling course below approach slab complete as per drawings and technical specifications complete as per specifications. MORTH specification No.2700 (Page No.237, Item No. 32.6)							
	Approaches.	2	9.00	13.00	0.15	35.10		
		2	9.00	3.50	0.15	9.45		
						44.55	5328.72	237394.00
							Per Cmtr	
	Basic Rate	4934.00						
	Add 8% A.W	394.72						
	Total	5328.72						

Sl. No.	Description	Dimensions				Qty.	Rate /	Amount
		No.	L.	B.	D		Unit	
10	KSRRB M2100-20.2 : Plain / Reinforced Cement concrete in open foundation with OPC cement design mix M35 @ 390 kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.68 cum and fine aggregates @ 0.45 cum with superplastisiser @ 3lts confirming to IS 9103-1999 Reaffirmed-2010complete as per drawing and technical specification. Case-II : With Batching Plant, Transit Mixer and Concrete Pump. MORTH Specification No.1500, 1700 & 2100 (Page No.210, Item No. 27.37)							
	Culvert Raft	1	151.00	4.90	0.50	369.95		
		2x1/2	151.00	0.30	0.15	6.80		
						376.75	6008.04	2263499.00
							Per Cmtr	
	Basic Rate	5563.00						
	Add 8% A.W	445.04						
	Total	6008.04						
11	KSRRB M2200-5.18 : Design mix M 35 with OPC cement @ 390kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.68cum and fine aggregates @ 0.45 cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008 i) upto 5m height (Page No.214, Item No. 28.7.18)							
	Culvert walls	2	151.00	0.40	1.75	211.40		
	Bracket to rest approach slab	2	13.00	0.135		3.51		
	Haunches	2x1/2	151.00	0.50	0.15	11.33		
						226.24	6728.40	1522200.00
							Per Cmtr	
	Basic Rate	6230.00						
	Add 8% A.W	498.40						
	Total	6728.40						
12	KSRRB M2300-8.1 : Furnishing and Placing Reinforced / Prestressed cement concrete in super-structure as per drawing and Technical Specification complete as per specifications. D.RCC/PSC with OPC cement design mix M35 @ 390kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.68cum and fine aggregates @ 0.45cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008. Case-II : Using Batching plant, Transit mixer & concrete pump Height upto 5m (Page No.223, Item No. 29.16.1)							
	For Slab portion	1	151.00	4.50	0.45	305.78		
	For crash barrier	1	3.60	0.32		1.15		
						306.93	6847.20	2101591.00
	Basic Rate	6340.00					Per Cmtr	
	Add 8% A.W	507.20						
	Total	6847.20						

Sl. No.	Description	Dimensions				Qty.	Rate /	Amount
		No.	L.	B.	D		Unit	
13	KSRRB M2200-6: Supplying, fitting and placing TMT bar reinforcement in sub-structure as per drawing and Technical Specifications complete as per specifications. MORTH Specification No.1600 & 2200 (Page No.215, Item No. 28.8)							
	For foundation @ 110kg/cum			41.44		41.44		
	For Substructure @ 100kg/cum			22.62		22.62		
						64.07	72390.24	4637713.00
							Per MT	
	Basic Rate	67028.00						
	Add 8% A.W	5362.24						
	Total	72390.24						
14	KSRRB M2300-14 : Supplying, fitting and placing TMT bar reinforcement in super-structure complete as per drawing and technical specifications complete as per specifications. MORTH specification No.1600 (Page No.228, Item No. 29.29)							
	For Culvert slab @ 110kg/			33.76		33.76		
						33.76	73193.76	2471166.00
							Per MT	
	Basic Rate	67772.00						
	Add 8% A.W	5421.76						
	Total	73193.76						
15	Providing 90mm dia PVC pipes 10 KSC) (Page No.XXXII, Sl. No.902 Code No. 3001)							
	for walls 0.40 mtr pipe	2.00	151.00		0.4	**120.80**	350.00	42280.00
							Per Rmt	
	Basic Rate	350.00						
	Total	350.00						
16	KSRRB M2700-7 : Reinforced cement concrete M30 approach slab including reinforcement and form work complete as per drawings and technical specifications complete as per specifications.MORTH specification No.1500, 1600, 1700, & 2704 (Page No.237, Item No. 32.7)							
		2	9.00	13.00	0.30	70.20		
		2	9.00	3.50	0.30	18.90		
						89.10	10648.80	948808.00
	Basic Rate	9860.00					Per cum	
	Add 8% A.W	788.80						
	Total	10648.80						

Sl. No.	Description	Dimensions				Qty.	Rate /	Amount
		No.	L.	B.	D		Unit	
17	KSRRB M2600-4 : (iii) Providing and fixing in position 20mm thick premoulded joint filler in expansion joint for fixed ends of simply supported spans not exceeding 10m to cater for a horizontal movement upto 20mm covered with sealant complete as per drawing & Technical specification complete as per specifications. MORTH specification No.2605 (Page No.233, Item No. 31.4)							
	For Box drain	6	5.00	0.45		13.50		
						13.50	174.96	2362.00
	Basic Rate	162.00					Per Mtr	
	Add 8% A.W	12.96						
	Total	174.96						
18	KSRRB 300-49 : Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials within a lead of 100 mtrs including cost of all labour charges complete as per specifications. MORTH / Chapter 3 (Page No.143, Item No. 19.55)							
		2	9.00	13.00		234.00		
		2	9.00	3.50		63.00		
						234.00	52.92	12383.00
							Per Sqm	
	Basic Rate	49.00				297		15717.24
	Add 8% A.W	3.92						
	Total	52.92						
19	KSRRB 300-45 : Scarifying stone metal crust 50mm to 100mm thick with pick axes along with premix carpet / surface dressing and stackign of old serviceable materials within a lead of 100 metres by manual means including cost of all labour charges complete as per specifications. MORTH / Chapter 3 (Page No.143, Item No. 19.51)							
		2	9.00	13.00		234.00		
		2	9.00	3.50		63.00		
						234.00	46.44	10867.00
						297	Per Sqm	
	Basic Rate	43.00						13792.68
	Add 8% A.W	3.44						
	Total	46.44						

Sl. No.	Description	Dimensions				Qty.	Rate / Unit	Amount
		No.	L.	B.	D			
20	KSRRB M400.14.1 : Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse agreegate, watering and compacting to the required density complete as per specification.A by Manual means. Type A 13.2mm for grading II. MORTH Specification No.404 (Page No.153, Item No. 20.14.1) 13.2 mm for grading II							
		2	9.00	13.00	0.15	35.10		
		2	9.00	3.50	0.15	9.45		
						35.10	1672.92	58719.00
							Per Cum	
	Basic Rate	1549.00				44.55		74528.58
	Add 8% A.W	123.92						
	Total	1672.92						
21	KSRRB M400.14.1 : Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse agreegate, watering and compacting to the required density complete as per specification.A by Manual means. Type B 11.2mm for grading III. MORTH Specification No.404 (Page No.153, Item No. 20.14.3)							
		2	9.00	13.00	0.10	23.40		
		2	9.00	3.50	0.10	6.30		
						23.40	1798.20	42078.00
							Per Cum	
	Basic Rate	1665.00				29.70		53406.54
	Add 8% A.W	133.20						
	Total	1798.20						

Sl. No.	Description	Dimensions				Qty.	Rate /	Amount
		No.	L.	B.	D		Unit	
22	Collecting, conveying and disposal of surplus / excavated earth to designated dumping site (15.00 kms) as directed by the Engineer in charge.							
	Qty considered 50% of item No 6					1014.35		
						1014.35	109.51	111083.00
	15x2.00x1.28 = ~~38.40~~ 38.40 / M3						Per Cum	
	Basic Rate	Pg 130 item no 17.4	38.40					
	Loading & Unloading	Pg 130/item no 17.4	63.00					
	Total	Total / cum	101.40					15942964.00
	Add 8% A.W	Pg e itno 1	8.11					1594929.14
	Total	Total / cum	109.51					
							SUB TOTAL Rs.	15762896.00
							Miscellaneous, Utility Shifting Charges	237104.00
							TOTAL Rs.	16000000.00

57035.00
50675.86

1 **CERTIFICATE**

2 The work spot has been inspected and the work is found to be necessary.

3 The Estimate is prepared as per the PW, P & WTD SR 2014-15
The provision made in estimate are adequate and essential.

Assistant Engineer
SWD, Yelahanka Zone
BBMP, Bangalore

Asst.Executive Engineer
SWD,Yelahanka Zone,
BBMP, Bangalore

Executive Engineer
SWD, Yelahanka Zone
BBMP, Bangalore

Administrative sanction for Rs. 160.00 lakhs
(Rs. One Crore Sixty lakhs only)
is accorded under head CM's Special funds
Registered as CE/SWD/AS/78/14-15 Subject to conditions contained in enclosed memo No. CE/SWD/AS/78/14-15/8 - 8 Dt. 21/10/14
AE/JE TA SE (S) CE (S)

Technically sanctioned for Rs. 160.00 lakhs
Rs. One Crore Sixty lakhs only
under CM's Special funds
Registered as CE/SWD/TS/62/14-15/7 - 7 Subject to conditions contained in enclosed memo No. CE/SWD/TS/62/14-15/7 - 7 Dt. 21/10/2014
AE/JE TA SE (S) CE (S)